

## Abstract

A new, more efficient memory translation algorithm facilitating the acquisition of a most appropriate translation in a target language from among those of nearly narrowed-down candidates of translation by separately applying the so-called dimension reducing functions of a template automaton and the LSI (latent semantic index) technique. Both the template automaton and the LSI principle play an important role in implementing an efficient process of narrowing down an efficient solution space from among the many example sentences of the databases in a target language by exploiting their respective unique search space reduction function. Once developed into a fully operational system, an expert editor rather than an expert translator can tune up the translation memory system, markedly widening the range of available experts who can utilize the system.